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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/655,498	09/05/2000	Donald C.D. Chang	PD-200114	8312

20991 7590 04/01/2003

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EXAMINER

VO, NGUYEN THANH

ART UNIT PAPER NUMBER

2682

DATE MAILED: 04/01/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/655,498

Applicant(s)

CHANG ET AL.

Examiner

Nguyen T Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 9-19 and 22-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statements filed 03/20/2001, 04/02/2001, 02/13/2002 have been considered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 1-3, 6-8, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seligsohn (WO 95/04407, cited by the examiner) in view of Ames (5,233,626, cited by applicant).

As to claims 1, 6, Seligsohn discloses a method for communicating between a user terminal 20, which has an antenna 7a, and multiple stratospheric transponder

platforms (see the balloon platforms 28 in figure 1) comprising the step of maintaining stratospheric transponder platforms in a substantially fixed position with respect to a user terminal antenna coupled to a user terminal (see page 7 lines 1-24). Seligsohn, however, fails to disclose communicating between the user terminal and at least two of the stratospheric transponder platforms concurrently as recited in the claim. Ames discloses a mobile communication system for providing communication between a user terminal 7 and a plurality of platforms (see numerals 3, 4, 6. See also column 4 lines 1-13). Ames further discloses communicating between the user terminal and at least two of the stratospheric transponder platforms concurrently (see column 2 lines 20-39; column 4 lines 1-14, lines 51-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above teaching of Ames to Seligsohn, in order to obtain a fade free communications between the user terminal and transmitting station (as suggested by Ames at column 2 lines 20-39).

As to claims 2, 7, 21, the combination of Seligsohn and Ames discloses that the user terminal communicates with the at least two of the stratospheric transponder platforms using the same frequency band (Ames employs spread spectrum communication as set forth at column 4 lines 15-50).

As to claims 3, 8, the combination of Seligsohn and Ames discloses that the user terminal communicates with one of the at least two of the stratospheric transponder platforms at a first data rate and with another of the at least two of the stratospheric transponder platforms at a second data rate (see Ames, column 8 lines 17-39).

As to claim 20, it is rejected for the same reasons as set forth in claim 1 above. In addition, the above combination fails to disclose multiple beams at the user terminal as claimed. However, the examiner takes Official Notice that such multiple beams are known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the above conventional multiple beams to the above combination, in order to improve signal reception at the user terminal by reducing signal interference.

***Allowable Subject Matter***

5. Claims 4-5, 9-19, 22-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 4, 9, the cited prior art, either alone or in combination, fail to disclose or render obvious that the user terminal communicates with a first Internet router via one of the at least two of the stratospheric transponder platforms and with a second Internet router via another of the at least two of the stratospheric transponder platforms.

As to claims 5, 10, the cited prior art, either alone or in combination, fail to disclose or render obvious that the user terminal communicates with a first media service provider via one of the at least two of the stratospheric transponder platforms and with a second media service provider via another of the at least two of the stratospheric transponder platforms.

As to claims 11-19, the cited prior art, either alone or in combination, fail to disclose or render obvious that the user terminal antenna comprises a single antenna

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reflector having a focal length and a focal point, and at least two feed horns coupled to the single antenna reflector for forming multiple beams as specified in the claims.

As to claims 22-24, the cited prior art, either alone or in combination, fail to disclose or render obvious the multiple beams as specified in the claims.

**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nguyen T Vo whose telephone number is (703) 308-6728. The examiner can normally be reached on Monday-Friday and alternate Monday from 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (703)305-4385. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for all communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



**NGUYEN T. VO  
PRIMARY EXAMINER**

Nguyen Vo

March 26, 2003